GYMNOSPORIUM HARKNESSIOIDES, ELL. & HOL.

JOURN. MYCOL., NO. 1, p. 6, AND NO. 2, p. 31 (VOL. 1.)

Prof. W. G. Farlow has examined this and considers it only the spores of Sordaria, or some related genus. He has recently submitted specimens to De Bary, who agrees with him in saying that the spots have no connection whatever with the leaf, but are the spores, in all probability, of a Sordaria, Chætomium, or some related ascomycetous fungus. E. W. D. H.

A NEW IOWA AECIDIUM.

One of the most conspicuous of all æcidial forms was found last summer, growing in abundance on the lopseed (*Phryma leptostachya*), at Spirit Lake, Iowa. Specimens were submitted to Dr. Farlow, who found no record of an æcidium upon *Phryma*. In view of this fact, the following may be given as a description of this æcidium, being fully aware that it is only a form of some species, known or otherwise, and that a provisional name is a convenient handle until the true one is found:

AECIDIUM PHRYMÆ, nov. sp.—Hypophyllous; spots effused, conspicuous, orange-yellow, not thickened, 1—3 cm. broad; æcidia usually in rows along sides of leaf veins, sometimes in evident circles, prominent, borders not greatly recurved; spores 20—25 *u* in diameter, globose, epispore thin, nearly smooth; spermogonia indistinct. On *Phryma leptostachya*, Spirit Lake, Iowa, July, 1885. B. D. HALSTED.

Iowa Agricultural College, Ames.

UNCINULA POLYCHAETA, B. & C.

UNCINULA POLYCHAETA, B. & C. Grev. IV, p. 159.

The description of this species in Grevillea is very brief, and is as follows:

"PERITHECIIS SPARSIS; APPENDICIBUS MULTIS. On leaves of *Celtis occidentalis*. Car. No. 5619.

Perithecia scattered; appendages about 28, 1½ times longer than the diameter of the perithecia, hyaline."

Prof. Spegazzini in his Fungi Argentini, Pug. 2, p. 17, describes, under the name of *Uncinula Lynchii*, an *Uncinula*, found on leaves of *Celtis Tala*, near Buenos Ayres, which, on p ge 44 of the same work, is said to be identical with *U. polychæta*, B. & C., and is taken as the type of a new genus, *Pleochæta*, S. & S. Two forms are mentioned: in the first of which the perithecia are densely gregarious and partially im-

mersed in the mycelium; and in the second, superficial and thickly scattered, globose, 180—200 *u* in diameter, at first orange-yellow, then black, surrounded with a circle of simple hyaline, straight, rather rigid, acicular appendages, 140—150 x 5—10 *u*, attenuated towards the apex, subobtuse, or uncinate-curved, and finally deciduous. Texture of the perithecia membranaceo-coriaceous, dark and opaque. Asci elliptical-ovate, 90—100 x 30—35 *u*, obtusely rounded above, abruptly contracted below into a thick, short pedicel, 2-spored, without paraphyses; sporidia hyaline, elliptical, 30—32 x 18—20 *u*, rounded at the ends, granulose.

The description here quoted does not give the number of the appendages nor of the asci. Having received from Spegazzini specimens of the fungus on leaves of *Celtis Tala*, I have carefully examined them, and compared them with the specimens of *Uncinula polychæta*, B. & C., in Rav. Fungi, Car. IV, No. 68, which is certainly the same thing. I find in both the specimens mentioned the number of appendages on several perithecia examined to be certainly 250, by actual count, and probably more, as in places they were matted together so that it was difficult to count them accurately. They are thickest in the middle, and attenuated towards each end, the lower half being distinctly roughened and the tips incurved with a single coil. The asci are about forty in number and, according to my measurement, about 75—80 x 25–30 *u*, each containing two sporidia, 25—30 x 15—18 *u*. The statement in Grevillea, copied into the Sylloge, that the number of appendages is about 28, is evidently a typographical mistake for 228. The length of the appendages is also *less* than the diameter of the perithecia. There is certainly no reason that I can see for making of this fungus a new genus separate from *Uncinula*.

J. B. E.

CRYPTOGAMIC BOTANY OF A FLORIDA LOG.--PAPER 4.

BY W. W. CALKINS, CHICAGO, ILLINOIS.

In the depths of the hummock, where I had often wandered in quest of Nature's wonders, I came suddenly upon a fallen giant,—a decayed *Quercus*. Having learned by experience that the "unexpected happens," and sometimes most happily, too, I determined to "size up" the botanical riches here before me. I was not disappointed, as the results show. Beginning with lichens, here were in beautiful fruit *Cladonia fimbriata, C pulchella, Lecanora punicea, Cladonia rangiferina, Thelotrema glaucescens, T. Domingensis*. The *fungi* were rich and abundant. *Polyporus gilvus*, Fr., and also what has passed for *Polyporus scruposus*, Fr., and *P. ferruginosus*, Fr., but the two latter, having been carefully examined by Mr. Ellis, must be included in the synonomy of the first. *Polyporus licnoides*, Mont., fine but scarce. *P. arcularius*, Fr., growing in the rotten bark. *Hypochnus rubrocinctus*, Ehrb., *Hypoxylon tinctor*, Berk., *Stereum complicatum*, Fr., and to close the list, a beautiful *Eutypa*, not